

## TAMPER DETECTION FOR BODY WORN TRANSMITTER

### ABSTRACT

A body worn transmitter and its associated portable monitoring receiver receiving global position signals, is provided with tamper detection to support twenty-four hour violation reporting from a subject under community supervision moves about the community. The body worn transmitter incorporates active radio frequency sensors to determine if the body worn transmitter has either been removed from the subject's body or the attachment strap has experienced tampering for the purpose of removal from the subject's body. A signal from the body worn transmitter is encrypted in order to prevent recording and retransmission of the body worn transmitter signal to an associated portable monitoring receiver for the purposes of masking body worn transmitter tampering or to make the body worn transmitter falsely appear in a different location. The body worn transmitter can be immersed in electrolyte solutions without generating a false tamper signal.